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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,395	12/21/2001	Mathew Sommers	GLO 2 0081	2949

27885 7590 11/20/2002

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EXAMINER

AMARANTIDES, JOHN

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/683,395		SOMMERS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	John Amarantides		2875	

-- Th MAILING DATE of this communication app ars on the cov r sheet with th correspond nce address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Pri rity under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The first and second elements recited in claims 7 – 10 do not appear in the specification or the drawings.

### *Claim Objections*

2. Claim 1 is objected to because of the following informalities: The Examiner can not determine where the preamble ends and the invention begins by using the word “comprising” in claim 1, lines 1 and 3. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 10 and 12 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, II (US005580163A) in view of P. M. Larraburu (US003302016).

a. In regard to claims 1 – 5, 12, 13, 17 and 18 Johnson, II teaches all the structural elements of the invention except for a lens system. Johnson, II in Figures 2 and 3 discloses a pattern (symmetrical) of LEDs (34 – 34Q) on a flexible light-emitting (substrate) cement mount (16) forming an LED module and a threaded inside housing (10) and threaded focusing ring (20) with outer housing (18) to zoom in and out. P. M.

Larraburu in Figure 1 discloses lenticular (fresnel) lenses (12, 13). LEDs require a protective layer to protect them from damage and/or collimate the light rays. This layer could be incorporated in the LED itself or as part of the housing. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to use the lenticular lens of P. M. Larraburu with the outside housing of Johnson, II to enhance the alignment of the LEDs and the lenses to improve the focus/zoom feature to provide the desired illumination effect.

b. In regard to claim 6, Johnson, II in view of P. T. Larraburu teaches all the structural elements of the invention. Johnson, II in Figures 2 and 3 discloses a focus (zoom) adjustment limit slot (42) with an adjustment limit screw (24) and lock screw for axial adjustments and to prevent rotation.

c. In regard to claims 7 – 10, 14 – 16, as best understood by the examiner, the first and second sleeves are the first and second elements. Johnson, II in view of P. T. Larraburu teaches all the structural elements of the invention. Johnson, II in Figures 2 and 3 discloses a pattern (symmetrical) of LEDs (34 – 34Q) on a flexible light-emitting (substrate) cement mount (16) forming an LED module and a threaded inside housing (10) and threaded focusing ring (20) to zoom in and out by using the focus (zoom) adjustment limit slot (42) parallel to the optical axis with an adjustment limit screw (24) and lock screw for axial adjustments and to prevent rotation.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, II (US005580163A) in view of P. M. Larraburu (US003302016) as applied to claim 1 above, and further in view of Roller (US006414801B1).

a. In regard to claim 11, Johnson, II in view of P. T. Larraburu teaches all the structural elements of the invention, except the heat sink. Roller in Figure 2 discloses a heat sink (70) to dissipate heat generated by the LEDs. Heat sinks are commonly used with LEDs to dissipate heat and are normally connected to the substrate or circuit board and are made of any material that is capable of heat transfer. Johnson, II in Figure 2 and 3 discloses a mount (suitable metal or plastic) outer ring (36) connected to the flexible light-emitting (substrate) cement mount (16) that acts as a heat sink. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to use the heat sink of Roller with the outside housing of Johnson, II to enhance the heat dissipation of the LEDs and improve the life span of the LED lighting system.

#### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to LED illumination devices;

- a. US006069447A to Vilanilam et al.
- b. US005083253A to Hahnel

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Amarantides whose telephone number is 703-305-4013. The examiner can normally be reached 8:00am-4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Sember can be reached on 703-308-1938. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3329.

JA

November 12, 2002

*Edw M. Symba*  
Thomas M. Symba  
Primary Examiner